FEATURES:
► Exceptional Phase Noise Performance
► Small Size, Surface Mount
► Lead Free Patented REL-PRO® Technology
► Planar Resonator Construction

SPECIFICATIONS (Rev. C 11/19/08)

**Frequency**
- 1680 - 1720 MHz

**Tuning Voltage**
- See table below.

**Bias Voltage**
- +8 VDC @ 38 mA (Max.)

**Output Power**
- +1 dBm (Min.)

**Tuning Sensitivity**
- 8 MHz/V (Typ.)

**Output Impedance**
- 50 Ohms (Nom.)

**Harmonic Suppression**
- 32 dB (Typ.)

**Frequency Pulling**
- 3 MHz (Typ. @ 1.75:1 VSWR)

**Frequency Pushing**
- 2 MHz/V (Typ.)

**Tuning Port Capacitance**
- 65 pF (Typ.)

**Phase Noise @ 10 kHz**
- -116 dBc/Hz (Typ.)

**Operating Temperature Range**
- -40 to +85 °C

**Guaranteed Tuning Specifications**

<table>
<thead>
<tr>
<th>Tuning Voltage (V)</th>
<th>Frequency (MHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
<td>1680 (Max.)</td>
</tr>
<tr>
<td>10</td>
<td>1720 (Min.)</td>
</tr>
</tbody>
</table>

**Absolute Maximum Ratings**

- Storage Temp. Range: -55 to +125 °C
- Bias Voltage: +8.5 V
- Tuning Voltage: +12 V
- DC Voltage Applied to RF Out: ± 25 V

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This product is manufactured under one or more of the following patents. Approved: 5,160,810; 5,122,621; 5,390,349; 5,416,449; 5,650,754; 5,805,431; 6,525,623; 6,850,575; 7,088,189; 7,180,381; 7,196,591; 7,251,830; 7,262,670; 7,265,642; 7,292,113; 7,365,612; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 2,563,174; 7,580,693; 7,586,381; 7,605,670; 7,636,021; 2,533,623; 7,612,296; 2,524,751

Pending: 60/493075; 60/501371 & 60/501790; 60/527957 & 60/528670; 60/563481; 60/564173; 60/589090; 60/601823; 60/527957 & 60/528670; 60/710310; 60/736901; 60/732787; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 2,563,174; 7,580,693; 7,586,381; 7,605,670; 7,636,021; 2,533,623

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VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO168172-8
OPTIMIZED BANDWIDTH
1680 - 1720 MHz

PERFORMANCE PLOTS
VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCRO168172-8

OPTIMIZED BANDWIDTH

1680 - 1720 MHz

PERFORMANCE PLOTS

- Tuning Sensitivity (MHz/V)
- 2nd Harmonic Suppression (dB)

Control Voltage (Vdc)

+25°C  +85°C  -40°C

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